Technical Report

The Work is Proposed by the Hon'ble MLA, Rajarajeshwari nagar Constituency & Corporator BBMP Ward No:-17. Has been Inspected & Proposed to Execute the Work. As per that 2016-17 Schedule of rates. BBMP Budget head P- ( ) Total 500.00Lakhs (1 Work) Grant has been Allotted for Proposed Construction Market Building at J.P. Park, with a financial provision of Rs. 500.00Lakhs (Job Code No:-

The Spot is Inspected by the Asst .Engineer Ward No: - 17. BBMP & Asst. Exe Engineer, Rajarajeshwari nagar Sub - division BBMP. The Estimate is prepared with the Following Provisions which are minimum & economical are made.

- ✓ Earthwork excavation in ordinary /Hard soil
- ✓ RCC Column & Beam bearing Structure.
- ✓ Designed for G+3 structures.
- ✓ Market building & Veterinary hospital building with one floor
- ✓ Block/Brick masonry work
- ✓ Plastering & Finishing work
- ✓ Granite Flooring for Corridors
- ✓ Provision of Plumbing & sanitary works
- ✓ Provision of internal Electrical works.
- ✓ Provision for Lift for Market building

The estimate has got up for Rs. 500.00 lakhs as per the PWD SR for the Year 2016-17 & Recent Issued rate adopted and submitted for further actions

Asst. Engineer
BBMP, Ward No- 17.

Asst.Exe Engineer,
Rajarajeshwari nagar Sub-Division,
BBMP, Bangaluru.

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

PROJECT:PROPOSED CONSTRUCTION OF MARKET BUILDING AT J.P.PARK IN WARD NO.17. BEHIND CHOWDESHWARI BUS STOP, J P PARK, WARD NO-17

DETAILED ABSTRACT

		Plinth Area in Sqm	
		Ground Floor	875.00
		First Floor	875.00
		Second Floor	875.00
		Terrace Floor	45.00
		Total	2670.00
Sl. No.	PARTICULARS		Total Cost in Rupees.
I	CIVIL WORK		
a	Civil works-		42,867,506.00
II	ELECTRICAL WORK		
a	Internal Electrical Works		3,350,010.00
b	External Electrical Works		1,709,715.65
III	PLUMBING & SANITARY WORKS		
a	Internal plumbing and sanitary works		853,223.76
	Sub Total - I		48,780,455.41
IV	Miscelaneous		
a	Add Consultancy Charges 2.5 % of Est cost	2.50%	1,219,511.39
			49,999,966.79
	Miscellaneous (Rounding off)		33.21
	TOTAL (I + II)		50,000,000.00
RUPEES FIVE HUNDRED LAKH ONLY			

K.E

Administrative approved for Rs. 500,00,000/-
Rs. (Five hundred lakhs only) is accorded
under the head P-3493
Const. of market building
By E.E.(P), R.R.N. Sl.No. 18, Pg.No. 12013
Registered as EE(P), R.R.N No. subject
to conditions contained in enclosed memo
No. 18/18-19 Date. 21/3/19

AEE/TA E.E(P), R.R.N

TECHNICAL SANCTION

Rs: 50000,000/- (Rs. Five crore only) is accorded
under the head: P-3493
By CE(R.R.N.,) Page No. 88-89
Registered as CE (R.R.N) No: 328/18-19 subject
to conditions contained in enclosed memo
No: 328/18-19 Date. 05/03/2019

BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP)

PROJECT: CONSTRUCTION OF MARKET BUILDING AT J.P.PARK IN WARD NO.17.

DETAILED ESTIMATE FOR PROPOSED CONSTRUCTION OF MARKET BUILDING AT J P PARK

Area Statement			
Ground Floor	875.00	Sq mt	
First Floor	875.00	Sq mt	
Second Floor	875.00	Sq mt	
Terrace Floor	45.00	Sq mt	
Total	2670.00	Sq mt	

ESTIMATED COST RS.500.00 LAKHS

B.O.Q for Market Building as per SR 2016-2017 - Bangalore Circle for civil works , SR 2014 -2015 Bangalore circle for Electrical works

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	DEMOLITION WORK									
1	KSRRB 200-8 **clearing grubbing** road lane including up rooting rank vegitation , grass , brush , shrubs , sapling & trees of girth up to 300mm by manual means, in area of **light jungle** , removal of stumps , disposal of un serviceabale materials , stacking of serviceabale materials with in a lead of 100 mtr from road boundary , labour charges complete as per specifications									
	(P.No.136, I.No.18.11 of PW,P&IWTD S.R 2016-17)									
	Site area	Sqm	1	1	80.00	20.00	--	1600.00		
								1600.00	**6.48**	**10368.00**
2	**KSRRB M200- 12.1 Dismanteling of** Exsisting structures like Culverts, Bridges, retaining wall & other structures compraising of masanry, cement concrete, wood work, steel work including T& P and scaffolding wherever necessary, sorting the Dismentalled metrial,disposoble of unserviceble material & stacking servicable material with lead of 1000 mts, complete as per specification 1.) Lime concrete/ Cement Concrete									
	KSRRB M200- 13.1 - do- II by mechanicaal means A cement Concrete Grade M 15- M20									
	(P.No.136, I.No.18.20 of PW,P&IWTD S.R 2016-17)									
	Building Near Drain 6.0 mt x5.5mts Roof Slab	Cum	1	1	6.00	5.50	0.150	**4.95**	**372.60**	**1844.00**
3	Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications.KSRRB M200-14.2. –do– Dismantling brick/Tile work B. In cement mortar. MORTH Specification No. 202									
	(P.No.137, I.No.18.23 of PW,P&IWTD S.R 2016-17)	Cum								
	Building			2	6.00	0.23	3.000	2.76		
				2	9.00	0.23	3.000	4.14		
								6.90	**263.52**	**1818.00**
4	**KSRRB M200- 12.1 Dismanteling of Exsisting structures** like Culverts, Bridges, retaining wall & other structures compraising of masanry, cement concrete, wood work, steel work including T& P and scaffolding wherever necessary, sorting the Dismentalled metrial,disposoble of unserviceble material & stacking servicable material with lead of 1000 mts, B13complete as per specification !!!) Dismanteling of Stone masonary MORTH Specification 202									
	KSRRB M200- 15.2 - do- B Rubble Stone masonary in Cement Morter	Cum								
	(P.No.137, I.No.18.27 of PW,P&IWTD S.R 2016-17)									
	Foundation	1	1	1	23.00	0.60	0.600	8.28		
	Piers	1		1	23.00	0.45	0.450	4.66		
								12.94		
							Say	13.00	**263.52**	**3426.00**
		TOTAL AMOUNT FOR DEMOLITION WORK								**17456.00**
	EARTH WORK									
5	Earthwork in surface excavation in **ordinary soil** for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeeding 50 m and lift upto 1.5m, excavated surface levelled and neatly dressed, disposed earth to be levelled after breaking of clods and nealty dressed as per specifications									
	(P.No.5, I.No.2.1 of PW,P & IWTD S.R 2016-17)									
	Overall area	**Cum**		1	80.00	20.00	0.100	160.00		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
							Say	160.00	169.56	27129.60
6	KSRB -2-2.1 : Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications.									
	(P.No.5, I.No.2.3 of PW,P & IWTD S.R 2016-17)									
	Ground floor	Cum								
	For Footings									
	F1			4	2.6	2.40	2.500	62.40		
	F2			16	2.8	2.60	2.500	291.20		
	F3			18	3	2.80	2.500	378.00		
	F4			10	3.2	3.00	2.500	240.00		
	F5			3	3.4	3.20	2.500	81.60		
	F6			6	3.6	3.40	2.500	183.60		
	F7			7	4	3.80	2.500	266.00		
			64							
	RCC Retaining Wall			1	145.00	2.00	1.500	435.00		
	Deduct Column Footings Area			-40	2.30	2.10	1.500	289.80		
	Staircase Foundation			1	1.80	0.90	0.300	0.49		
							Total	1648.49		
	Considered 80% of Total Qty						Say	1318.79	204.12	269191.17
7	Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width in **IN HARD SOIL** not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications.									
	(P.No.5, I.No.2.4 of PW,P & IWTD S.R 2016-17)									
	Considered 20% of Total Qty							329.70		
							Say	65.94	305.64	20153.73
8	KSRB 3.2: Providing and injecting chemical emulsion for Pre-constructional **Anti-Termite Treatment,** creating continuous chemical barrier under and around the column pits, walls, trenches, basement excavation, top surface of the plinth filling, junction of wall and floor,along the external perimeter of building,expansion joints,over the top surface of consolidated earth on which apron is to be laid,surrounding of pipes and conduits with chloropyriphos emulsifiable concentrates of 20% concentration,including cost of chemical,diluting in water to one percent concentration, labour, HOM of equipments, complete as per specifications.(Plinth area of the building at ground floor only shall be measured) Specification No.KBS: 3.2.6 / 3.2.7									
	(P.No.9, I.No.3.2 of PW,P & IWTD S.R 2016-17)									
	Plinth area			1	58.00	15	--	870.00		
								870.00		
							Say	870.00	111.24	96778.80
9	Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications.									
	(P.No.5, I.No.2.15 of PW,P & IWTD S.R 2016-17)									
	Below Foundation -									
	F1			4	2.6	2.40	0.300	7.49		
	F2			16	2.8	2.60	0.300	34.94		
	F3			18	3	2.80	0.300	45.36		
	F4			10	3.2	3.00	0.300	28.80		
	F5			3	3.4	3.20	0.300	9.79		
	F6			6	3.6	3.40	0.300	22.03		
	F7		64	7	4	3.80	0.300	31.92		
	RCC Retaining Wall			1	145	2	0.300	87.00		
	Deduct Column Footings Area			-40	2.3	2.1	0.300	57.96		
								209.38		
							Say	209.50	2283.12	478313.64
10	KSRB 2.6 : Providing and filling sand in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.									

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	(P.No.6, I.No.2.13 of PW,P & IWTD S.R 2016-17)									
	Below Foundation- 2" thick									
	F1			4	2.1	1.90	0.050	0.80		
	F2			16	2.3	2.10	0.050	3.86		
	F3			18	2.5	2.30	0.050	5.18		
	F4			10	2.7	2.50	0.050	3.38		
	F5			3	2.9	2.70	0.050	1.17		
	F6			6	3.1	2.90	0.050	2.70		
	F7			7	3.5	3.30	0.050	4.04		
	RCC Retaining Wall			1	145	2.00	0.050	14.50		
	Deduct Column Footings Area			-40	2.3	2.1	0.050	9.66		
	Providing and Filling in foundation with granite / trap									
			64					25.97		
							Say	**26.00**	**2305.80**	**59950.80**
11	KSRRB M300-53. **Construction of embankment** with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications, including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density. MORTH Specification No. 305									
	(P.No.148, I.No.19.60 of PW,P & IWTD S.R 2016-17)									
	Filling of murrum up to plinth bottom level									
	For Shop Upto Drain top			1	58.00	14.6	0.600	508.08		
								508.08		
								508.10	**326.16**	**165721.90**
		TOTAL AMOUNT FOR EARTH WORK								**1117239.64**
	PCC & RCC WORK									
12	KSRB 4-1.3 : Providing and laying in position **plain cement concrete** of mix **1:3:6** with OPC cement @ 180 kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85 cum and fine aggregates @ 5.75 cum machine mixed, concrete laid in layers not exceeding 15 cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specification.									
	(P.No.12, I.No.4.2 of PW,P & IWTD S.R2016-17)									
	Ground floor									
	For Footings									
	F1			4	2.6	2.40	0.125	3.12		
	F2			16	2.8	2.60	0.125	14.56		
	F3			18	3	2.80	0.125	18.90		
	F4			10	3.2	3.00	0.125	12.00		
	F5			3	3.4	3.20	0.125	4.08		
	F6			6	3.6	3.40	0.125	9.18		
	F7			7	4	3.80	0.125	13.30		
	RCC Retaining Wall			1	145.00	1.80	0.125	32.63		
	Deduct Column Footings Area			-40	2.3	1.80	0.125	20.70		
	for floor area			1	838.04	--	0.125	104.76		
								191.82		
							Say	**191.90**	**5449.68**	**1045793.59**
13	KSRB 4-1.6 : Providing and laying in **position plain cement concrete** of mix **M15** with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggergates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specification. Specification No. KBS 4.1, 4.2									
	(PWD SR 2016-17/P.No. 12/4.6)									
	Terrace Floor Water proofing Screed	Cum								
	On Second Floor roof			1	870.00		0.075	65.25		
	Terrace Parapet wall coping			1	146.00		0.100	14.60		
	Window Cills			2	146.00		0.100	29.20		
								109.05		
							Say	**109.10**	**6038.28**	**658776.35**

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate	Amount
			N1	N2	L	B	D		in Rs.	in Rs.
14	KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to IS 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6									
	(PWD SR 2016-17/P.No. 13/4.10)									
	Ground Floor									
	Lintels									
	Over Lift			1	1.20	0.20	0.450	0.11		
	Proposed Staircase - GF TO FF									
	Foundation			1	1.80	0.90	0.300	0.49		
	Steps		0.5	24	1.50	0.30	0.150	0.81		
	Flight - 1			1	1.27	1.80	0.175	0.40		
	Flight - 2			1	2.60	1.80	0.175	0.82		
	Flight -3			1	1.27	1.80	0.175	0.40		
	Landing			2	1.50	1.50	0.175	0.79		
	Landing Beam			1	6.30	0.20	0.450	0.57		
								4.38		
							Say	**4.50**	**6718.68**	**30234.06**
	First Floor									
	Lintels									
	Over Lift			1	1.2	0.20	0.45	0.11		
	Proposed Staircase - FF TO SF									
	Flight - 1			1	1.27	1.8	0.175	0.40		
	Flight - 2			1	2.6	1.8	0.175	0.82		
	Flight -3			1	1.27	1.8	0.175	0.40		
	Landing			2	1.5	1.5	0.175	0.79		
	Landing Beam			1	6.3	0.2	0.45	0.57		
								3.08		
							Say	**3.50**	**6772.68**	**23704.38**
	Second Floor									
	Lintels									
	Through partion wall			1	50.00	0.10	0.150	0.75		
	Over windows									
	W1			36	2.30	0.20	0.200	3.31		
	W2			2	1.80	0.20	0.200	0.14		
	Ventilators			10	1.05	0.20	0.200	0.42		
	Proposed Staircase - SF TO THF									
	Steps		0.5	24	1.5	0.3	0.150	0.81		
	Flight - 1			1	1.27	1.8	0.175	0.40		
	Flight - 2			1	2.6	1.8	0.175	0.82		
	Flight -3			1	1.27	1.8	0.175	0.40		
	Landing			2	1.5	1.5	0.175	0.79		
	Landing Beam			1	6.3	0.2	0.450	0.57		
								8.41		
							Say	**8.50**	**6826.68**	**58026.78**
	Third Floor									
	Same as Second Floor Qty						Say	**8.50**	**6880.68**	**58485.78**
15	Providing and laying cement concrete using 20mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., with all lead and lift etc., complete. (exculsive of cost of steel and fabrication charges)									
	Ready mixed Cement concrete for Beams, Staircase and Roof with M-30									
	(P.No.18, I.No.4.49.3 of PW,P & IWTD S.R 2016-17)									
	Ground floor									
	Footings	**Cum**								
	F1			4	2.30	2.10	0.400	7.73		
	F2			16	2.50	2.30	0.400	36.80		
	F3			18	2.70	2.50	0.450	54.68		
	F4			10	2.90	2.70	0.500	39.15		
	F5			3	3.10	2.90	0.600	16.18		
	F6			6	3.30	3.10	0.600	36.83		
	F7			7	3.70	3.50	0.700	63.46		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
			64							
	RCC Retaining Wall									
	Base Slab			1	145	1.5	0.350	76.13		
	Deduct Column Footings Area			-40	2.3	1.7	0.350	54.74		
	Retaining Wall			1	145.00	0.20	3.200	92.80		
	Deduct Column			40	0.30	0.20	3.200	7.68		
	Plinth Beams									
	Beam (200X450)									
	Total Length			1	296.50	0.20	0.450	26.69		
	Beam (230X450)									
	Total Length			2	2.50	0.23	0.450	0.52		
	Beam (300X450)									
	Total Length			1	160.00	0.30	0.450	21.60		
	Pedestals									
	Column-C1 (300X600)			36	0.45	0.75	1.000	12.15		
	Column-C2 (230X600)			4	0.38	0.75	1.000	1.14		
	For Column									
	Below Plinth									
	Column-C1 (300X600)			60	0.30	0.6	1.000	10.80		
	Column-C2 (230X600)			4	0.23	0.6	1.000	0.55		
	Column-C3 (300X300)			14	0.3	0.3	1.000	1.26		
	Above Plinth									
	Column-C1 (300X600)			60	0.30	0.60	2.550	27.54		
	Column-C2 (230X600)			4	0.23	0.60	2.550	1.41		
	Column-C3 (300X300)			14	0.30	0.30	2.550	3.21		
	Roof Beams									
	Beam (150X450)			1	24.00	0.15	0.300	1.08		
	Beam (200X450)			1	304.00	0.20	0.300	18.24		
	Beam (230X450)			1	2.00	0.23	0.300	0.14		
	Beam (300X450)			1	249.00	0.30	0.300	22.41		
	Roof slab									
	Total Area			1	57.90	15.00	0.150	130.28		
	Slab Projection Front			1	57.80	1.20	0.150	10.40		
	Slab Projection Side			1	4.80	1.20	0.150	0.86		
	Deduction									
	Stair case & Lift Portion area			1	6.40	3.00	0.150	2.88		
								648.72		
							Say	**649.00**	**6742.44**	**4375843.56**
	First Floor									
	Column									
	Column-C1 (300X600)			60	0.3	0.6	3.15	34.02		
	Column-C2 (230X600)			4	0.23	0.6	3.15	1.74		
	Column-C3 (300X300)			14	0.3	0.3	3.15	3.97		
	Roof Beams									
	Beam (150X450)			1	24.0	0.15	0.3	1.08		
	Beam (200X450)			1	304.0	0.20	0.3	18.24		
	Beam (230X450)			1	2.0	0.23	0.3	0.14		
	Beam (300X450)			1	249.0	0.30	0.3	22.41		
	Roof slab									
	Total Area			1	57.9	15	0.15	130.28		
	Cantilever Portico In front			1	6.60	2.50	0.150	2.48		
	Deduction									
	Stair case & Lift Portion area			1	6.4	3	0.15	2.88		
							Grand Total	211.47		
							Say	**211.50**	**6742.44**	**1426026.06**
	Second Floor									
	Column									
	Column-C1 (300X600)			60	0.3	0.6	3.150	34.02		
	Column-C2 (230X600)			4	0.23	0.6	3.150	1.74		
	Roof Beam									
	Beam (150X450)			1	24	0.15	0.3	1.08		
	Beam (200X450)			1	134.00	0.2	0.300	8.04		
	Beam (230X450)			2	1	0.23	0.300	0.14		
	Beam (300X450)			1	240	0.23	0.300	16.56		
	Roof slab									
	Total Area			1	57.90	15.00	0.150	130.28		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	Stair case & Lift Portion area			1	6.40	3.00	0.150	2.88		
								188.97		
							Say	**189.00**	**6742.44**	**1274321.16**
	Third Floor									
	Same as First Floor Qty						Say	**189.00**	**6742.44**	**1274321.16**
	Terrace Floor									
	Column									
	Column (300X600)			4	0.30	0.60	2.100	1.51		
	Column (230X600)			4	0.23	0.60	2.100	1.16		
	Terrece Floor Roof Beam									
	Beam (300X450) Total Length			1	30.00	0.30	0.300	2.70		
	Beam (230X450) Total Length			1	18.00	0.30	0.300	1.62		
	Terrece Floor Roof Slab									
	Area			1	7.00	7.00	0.150	7.35		
								14.34		
							Say	**14.50**	**6742.44**	**97765.38**
		TOTAL AMOUNT FOR PCC & RCC WORK								**10323298.26**
	SHUTTERING WORK									
16	Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for **Foundation , footing** , bases of **columns** for mass concrete including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 -									
	(P.No.15, I.No.4.28 of PW,P & IWTD S.R 2016-17)									
	Footing	**Sqm**								
	F1			4	8.80	--	0.400	14.08		
	F2			16	9.60	--	0.400	61.44		
	F3			18	10.40	--	0.450	84.24		
	F4			10	11.20	--	0.500	56.00		
	F5			3	12.00	--	0.600	21.60		
	F6			6	12.80	--	0.600	46.08		
	F7			7	14.40	--	0.700	70.56		
	RCC Retaining Wall									
	Base Slab		2	1	145	--	0.350	101.50		
	Deduct Column Footings Area		2	-40	1	--	0.350	28.00		
	Pedestals									
	Column-C1 (300X600)			36	2.40	--	1.000	86.40		
	Column-C2 (230X600)			4	2.26	--	1.000	9.04		
								522.94		
							Say	**523.00**	**249.48**	**130478.04**
17	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface such as walls at any thickness,** including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2									
	(P.No.15, I.No.4.31 of PW,P & IWTD S.R 2016-17)									
	Retainig wall & lift pit walls									
	Retaining Wall		2	145	4.00			**1160.00**		
	Column		80	0.5	4.00			160.00		
	Lift pit		2	8	2.00			**32.00**		
								1032.00		
							Say	**1032.00**	**316.44**	**326566.08**
18	Providing and removing centering, shuttering, strutting, propping etc., an removal of form work for **sides & soffits of beams,** beam hauncing cantilever girders, bressumers & lintels & not exceeding 1.0 in depth including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 -									
	(P.No.16, I.No.4.34 of PW,P & IWTD S.R2016-17)									
	Ground Floor	**Sqm**								
	Plinth Beams									
	Beam (200X450)									
	Total Length		2	1	296.5	--	0.45	266.85		
	Base		1	1	296.5	0.20	--	59.30		
	Beam (230X450)									
	Total Length		2	2	2.5	--	0.45	4.50		
	Base		1	2	2.5	0.23	--	1.15		
	Beam (300X450)									
	Total Length		2	1	160.0	--	0.45	144.00		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	Base		1	1	160.0	0.30	--	48.00		
	Roof Beams									
	Beam (150X450)		2	1	24.0	--	0.30	14.40		
	Base		1	1	24.0	0.20	--	4.80		
	Beam (200X450)		2	1	304.0	--	0.30	182.40		
	Base		1	1	304.0	0.20	--	60.80		
	Beam (230X450)		2	1	2.0	--	0.30	1.20		
	Base		1	1	2.0	0.23	--	0.46		
	Beam (300X450)		2	1	249.0	--	0.30	149.40		
	Base		1	1	249.00	0.30	--	74.70		
								1011.96		
							Say	**1012.00**	**276.48**	**279797.76**
	First Floor									
	Roof Beams									
	Beam (150X450)		2	1	24	--	0.3	14.40		
	Base		1	1	24	0.2	--	4.80		
	Beam (200X450)		2	1	304	--	0.3	182.40		
	Base		1	1	304	0.2	--	60.80		
	Beam (230X450)		2	1	2	--	0.3	1.20		
	Base		1	1	2	0.23	--	0.46		
	Beam (300X450)		2	1	249	--	0.3	149.40		
	Base		1	1	249	0.3	--	74.70		
								488.16		
							Say	**488.20**	**281.88**	**137613.82**
	Second Floor									
	Lintels									
	Through partion wall		2	1	50.00	--	0.150	15.00		
	Over windows									
	W1		2	36	2.3	--	0.150	24.84		
	Base		1	36	2.30	0.2	--	16.56		
	W2		2	2	1.80	--	0.200	1.44		
	Base		1	2	1.80	0.2	--	0.72		
	Ventilators		2	10	1.05	--	0.150	3.15		
	Base		1	10	1.05	0.2	--	2.10		
	Roof Beam									
	Beam (150X450)		2	1	24.0	0.15	0.30	14.40		
	Base		1	1	24.0	0.15	--	3.60		
	Beam (200X450)		2	1	134.0	0.20	0.30	80.40		
	Base		1	1	134.0	0.20	--	26.80		
	Beam (230X450)		2	2	1.0	0.23	0.30	1.20		
	Base		1	2	1.0	0.23	--	0.46		
	Beam (300X450)		2	1	240.0	0.23	0.30	144.00		
	Base		1	1	240.0	0.30	--	72.00		
							Total	406.67		
							Say	**406.70**	**287.28**	**116836.78**
	Third Floor									
	same as first floor Qty						Say	**406.70**	**292.68**	**119032.96**
	Terrece Floor									
	Beam (300X450) Total Length		2	1	30	--	0.300	18.00		
	Base		1	1	30	0.3	--	9.00		
	Beam (230X450) Total Length		2	1	18	--	0.300	10.80		
	Base		1	1	18	0.23	--	4.14		
								41.94		
							Say	**42.00**	**298.08**	**12519.36**
18	Providing and laying in position reinforced cement cocnrete of design **mix M20** with OPC cement @ 27.20 Kgs with 12mm & down sizes graded grantie metal coarse aggregated @ 0.5865 cum & fine aggregates, @ 0.391 Cum with super super plastisiser @ 0.225 Ltrs maichine mixed well **compacted plain chajja 7.5 Cms** avg thickness, up to ground floor level including removing centering, shuttering, strutting, propping etc., and removal of form work for cost of all materials, laobur HOM of machinary, curing complete as per specification -									
	(P.No.14, I.No.4.19 of PW,P & IWTD S.R 2016-17)									
	Second Floor	Sqmt								
	W1			36	2.30	0.60	--	49.68		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate	Amount
			N1	N2	L	B	D		in Rs.	in Rs.
	W2			2	1.80	0.60	--	2.16		
	V			10	1.05	0.60	--	10.80		
							Say	**62.64**	**503.28**	**31525.46**
	Third Floor									
	same as first floor Qty						Say	**62.64**	**508.68**	**31863.72**
19	Extra For providing throating or **drip moulding** to **RCC chajjas** with plastreing(labour charges only), as perspecification									
	(P.No.14, I.No.4.21 of PW,P & IWTD S.R 2016-17)									
	Second Floor									
	W1	**M**		36	3.50	--	--	126.00		
	W2			2	3.00	--	--	6.00		
	V			10	2.25	--	--	22.50		
								154.50		
							Say	**154.50**	**21.60**	**3337.20**
	Third Floor									
	same as first floor Qty						Say	**154.50**	**21.60**	**3337.20**
20	Providing and removing centering, shuttering, strutting, propping etc., for **chajjas**, corbels of all shapes & sizes, at all elevations & heights -									
	(P.No.16, I.No.4.37 of PW,P & IWTD S.R 2016-17)									
	Second Floor	**Sqmt**								
	W1			36	2.3	0.6	--	49.68		
	W2			2	1.80	0.6	--	2.16		
	V			10	1.05	0.6	--	6.30		
							Say	**58.14**	**302.40**	**17581.54**
	Third Floor									
	same as first floor Qty						Say	**62.64**	**307.80**	**19280.59**
21	Providing and removing centering, shuttering, strutting, propping etc., for **columns, pillars, piers, abutments,** post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2 -									
	(P.No.16, I.No.4.32 of PW,P & IWTD S.R 2016-17)									
	Ground Floor	**Sqmtr**								
	Below plinth									
	Column-C1 (300X600)			60	1.80	--	1.000	108.00		
	Column-C2 (230X600)			4	1.66	--	1.000	6.64		
	Above plinth									
	Column-C1 (300X600)			60	1.80	--	3.150	340.20		
	Column-C2 (230X600)			4	1.66	--	3.150	20.92		
							Say	**475.76**	**395.28**	**188056.83**
	First Floor									
	Column-C1 (300X600)			60	1.80	--	3.150	340.20		
	Column-C2 (230X600)			4	1.66	--	3.150	20.92		
							Say	**361.12**	**400.68**	**144691.96**
	Second floor									
	same as first floor Qty						Say	**361.12**	**406.08**	**146641.99**
	Third Floor									
	same as first floor Qty						Say	**361.12**	**411.48**	**148592.01**
	Terrace Floor									
	Column (300X600)			4	1.80	-	2.1	15.12		
	Column (230X600)			4	1.66	-	2.1	13.94		
								29.06		
							Say	**29.10**	**416.88**	**12131.21**
22	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **flat surface** such as suspended floors, **roofs**, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specifications. Specification upto 3.5 m from Ground level -									
	(P.No.15, I.No.4.18 of KPWD S.R 2016-17)									

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	Ground Floor	Sqmtr								
	Total Area			1	57.90	15	--	868.50		
	Slab Projection Front			1	57.80	1.2	--	69.36		
	Slab Projection Side			1	4.80	1.2	--	5.76		
								943.62		
	Deduction									
	Stair case & Lift Portion area			1	6.40	3	--	19.20		
					Total			924.42		
							Say	**924.42**	**338.04**	**312490.94**
	First Floor									
	Total Area			1	57.9	15	0.15	868.50		
	Cantilever Portico In front			1	6.6	2.5	0.15	16.50		
								885.00		
	Deduction									
	Stair case & Lift Portion area			1	6.4	3	0.15	19.20		
					Total			865.80		
							Say	**865.80**	**343.44**	**297350.35**
	Second Floor									
	same as first floor Qty				Total			**865.80**	**348.84**	**302025.67**
	Third Floor									
	same as first floor Qty				Total			**865.80**	**354.24**	**306700.99**
	Terrece Floor									
	total area of head room			1	7.00	7.00	--	**49.00**	**359.64**	**17622.36**
23	Providing and removing centring, shuttering, strutting, proping etc., and removal of form work for **stairs** (excluding landing) except spiral staircase including cost of all materials,labour complete as per specification and directed by the Engineer in Charge -									
	(P.No.16, I.No.4.38 of PW,P & IWTD S.R 2016-17)									
	Proposed Staircase - GF TO FF	**Sqmtr**								
	Foundation			1	5.40	--	0.300	1.62		
	Steps			24	1.50	--	0.150	5.40		
	Flight - 1			2	2.80	--	1.500	8.40		
	Flight - 2			1	2.72	--	1.500	4.08		
	Sides			4	2.80		0.300	3.36		
				2	2.72		0.300	1.63		
								24.49		
					Total			**24.50**	**513.00**	**12568.50**
	Proposed Stair Case -FF TO SF									
	Steps			24	1.5	--	0.15	5.40		
	Flight - 1			2	2.8	--	1.5	8.40		
	Flight - 2			1	2.72	--	1.5	4.08		
	Sides			4	2.8	--	0.3	3.36		
								21.24		
	Same As First Floor						Say	**21.30**	**518.40**	**11041.92**
	Proposed Stair Case - SF TO TF									
	Same As First Floor						Say	**21.30**	**523.80**	**11156.94**
	Proposed Stair Case - THF TO TEF						Say	**21.30**	**529.20**	**11271.96**
	Same As First Floor									
				TOTAL AMOUNT FOR SHUTTERING WORK						**3152114.12**
	REINFORCEMENT WORK									
24	Providing **TMT Steel reinforcement** for **RCC works** including straightening, cutting, bending, hooking, placing in position lapping and / or welding wherever required, tieng with binding wire and anchoring to the adjoining members wherever necessary, complete as per design (laps, hooks and wastage shall not be measured and paid) cost of all materials, labour, HOM of machineries etc., complete as per specifications. Specification No.KBS 4.6.3. FOR TMT Bars Fe- 500 -									
	(P.No.17&18 I.No.4.46.2&4.47 of KPWD S.R 2016-17)									
	Ground floor	**Tonn**								
	For Footing **60kg Per Cum**			--	--	--	--	16572.18		
	For Pedestals **70kg Per Cum**							930.30		
	For Plinth Beam - **150 Kg/Cum**			--	--	--	--	7320.38		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	For Columns **250 Kg/Cum**			--	--	--	--	11193.15		
	For Roof Slabs 75**Kg/Cum**			--	--	--	--	10399.73		
	For Roof Beam - **225 Kg/Cum**							9420.30		
	For Stair Case and Lintels **150Kg/Cum**			--	--	--	--	656.64		
	Retaining wall **80kg per Cum**							6809.60		
	Miscelaneous works							200.00		
								63502.27		
								63.50		
							Say	**63.60**	**65455.56**	**4162973.62**
	First Floor									
	For Columns **250 Kg/Cum**			--	--	--	--	9931.95		
	For Roof Slabs 75**Kg/Cum**			--	--	--	--	9740.25		
	For Roof Beam - **225 Kg/Cum**							9420.30		
	For Stair Case and Stair **150Kg/Cum**			--	--	--	--	462.24		
	Miscelaneous works							200.00		
								29754.74		
								29.75		
							Say	**29.80**	**65965.32**	**1965766.54**
	Second Floor									
	For Columns **250 Kg/Cum**							8939.70		
	For Roof Slabs 75**Kg/Cum**							9554.63		
	For Roof Beam - **225 Kg/Cum**							5809.05		
	For Stair Case and Stair **150Kg/Cum**							1261.44		
	Miscelaneous works							200.00		
								25764.82		
								25.76		
							Say	**25.80**	**66475.08**	**1715057.06**
	Third Floor									
	Same as Second Floor Qty						Say	**25.80**	**66984.84**	**1728208.87**
	Terrece Floor									
	For Columns **200 Kg/Cum**			--	--	--	--	534.24		
	For Roof Slabs 75**Kg/Cum**			--	--	--	--	551.25		
	For Roof Beam - **225 Kg/Cum**			--	--	--	--	972.00		
	Miscelaneous works							50.00		
								2107.49		
								2.11		
							Say	**2.20**	**67494.60**	**148488.12**
			TOTAL AMOUNT FOR REINFORCEMENT WORK							**9720494.21**
	MASONARY WORK									
25	Providing and constructing load bearing wall with **solid concrete blocks** having block density not less than 1800kg/m3 having a minimum average compressive strength of 5.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4 - do - with solid concrete blocks of size **400x200x200mm**									
	(P.No.25, I.No.5.27.1 of KPWD S.R 2016-17)									
	Ground floor	**Sqmt**								
	200mm Wall									
	Total Length			1.00	215.00	--	2.550	548.25		
	Above Retaing Wall			1.00	140.00	--	1.350	189.00		
								737.25		
	Deductions									
	Rolling Shutter									
	RS1			13	3.00	--	2.550	99.45		
	RS2			22	2.90	--	2.550	162.69		
	RS3			2	2.50	--	2.550	12.75		
	Lift Opening			1	0.90	--	2.550	2.30		
	Ventilators			36	1.8	--	0.6	38.88		
								316.07		
								421.19		
					Total			**421.20**	**1011.96**	**426237.55**
	First Floor									
	200mm Wall									
	Total Length			1	390.00	--	3.150	1228.50		

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate in Rs.	Amount in Rs.
			N1	N2	L	B	D			
	Deductions									
	Rolling Shutter									
	RS1			28	3.00	--	3.150	264.60		
	RS2			22	2.90	--	3.150	200.97		
	RS3			2	2.50	--	3.150	15.75		
	Lift Opening			1	0.90	--	3.150	2.84		
	Ventilators			36	1.80	--	0.600	38.88		
								523.04		
								705.47		
							Say	**705.50**	**1044.36**	**736795.98**
	Second Floor									
	200mm Wall									
	Horizantal Length			1	155.00	--	3.150	488.25		
	Vertical Length			1	50.00	--	3.150	157.50		
								645.75		
	Deductions									
	Doors									
	D1			4	0.90	--	2.100	7.56		
	Lift Opening			1	0.90	--	2.100	1.89		
	Rolling Shutter									
	RS3			1	2.50	--	3.150	7.88		
	RS4			2	3.00	--	3.150	18.90		
	Windows									
	W1			36	2.00	--	1.500	108.00		
	W2			2	1.50	--	1.500	4.50		
	Ventilaors			10	0.90	--	0.750	6.75		
								155.48		
								490.28		
					Total			**490.30**	**1076.76**	**527935.43**
	Third floor									
	same as first floor Qty									
					Total			**490.30**	**1109.16**	**543821.15**
	Terrece Floor									
	head room total length			1	30.00	--	2.100	63.00		
	Parapet Wall			1	140.00	--	1.000	140.00		
								203.00		
	Deduction									
	MS Door			1	1.20	--	2.100	2.52		
	W1			3	1.50	--	1.500	6.75		
	Lift Opening			1	0.90	--	2.100	1.89		
								11.16		
								191.84		
					Total			**191.90**	**1141.56**	**219065.36**
26	Providing and constructing non load bearing wall with solid concrete blocks of size 400x100x200mm having a block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials, labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. KBS No.5.4									
	(P.No.25, I.No.5.28 of KPWD S.R 2016-17)									
	Second floor	**Sqm**								
	Toilet wall total length			1	30.00	--	3.150	94.50		
								94.50		
	Deductions									
	Doors									
	D2			8	0.75	--	2.100	12.60		
	Openings									
	O1			2	1.00	--	3.150	6.30		
	O2			2	0.90	--	3.150	5.67		
	O3			4	0.75	--	3.150	9.45		
								34.02		
					Total			60.48		
							Say	**60.50**	**838.08**	**50703.84**
	Third floor									

Sl No	Description of work	Unit	No		Dimensions			Quantity	Rate	Amount
			N1	N2	L	B	D		in Rs.	in Rs.
	same as first floor Qty						Say	**60.50**	**870.48**	**52664.04**
		TOTAL AMOUNT FOR MASONARY WORK								**2557223.35**
	PLASTERING & FINESHES WORK									
27	Providing **18mm thick** cement plaster in single coat with cement mortor 1:3 to Brick masonary including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications **Externel**									
	(P.No.113, I.No.15.15 of PW,P & IWTD S.R2016-17)									
	Ground floor	**Sqmt**								
	For Out Side									
	Shop outer side side			1	145.00	--	3.000	435.00		
	Deduction									
	RS1		0.5	16	3.00	--	2.550	61.20		
	Ventilators		0.5	36	1.80	--	0.60	19.44		
								80.64		
						Total		354.36		
							Say	**354.40**	**263.52**	**93391.49**
	First Floor									
	Shop outer side side			1	145	--	3.600	522.00		
	Deduction									
	RS1		0.5	16	3	--	3.15	75.60		
	Ventilators		0.5	36	1.8	--	0.6	19.44		
								95.04		
						Total		426.96		
							Say	**427.00**	**263.52**	**112523.04**
	Second Floor									
	Outside including all			1	171	--	3.600	615.60		
								615.60		
	Deduction									
	W1		0.5	36	2.3	0.6	--	24.84		
	W2		0.5	2	1.8	0.6	--	1.08		
	V		0.5	10	1.05	0.6	--	3.15		
								29.07		
						Total		586.53		
							Say	**586.60**	**263.52**	**154580.83**
	Third Floor									
	Same as Second floor Qty						Say	**586.60**	**263.52**	**154580.83**
	Terrace floor									
	Parapet Wall			2	140.00	--	1.000	280.00		
	head room total length			1	30.00	--	2.600	78.00		
								358.00		
	Deduction									
	Steel Truss		0.5	1	2.50	--	2.100	2.63		
	W1		0.5	1	1.50	--	1.500	1.13		
								3.75		
							Total	354.25		
							Say	**354.30**	**263.52**	**93365.14**
28	Providing 18mm thick cement plaster in single coat with cement mortor 1:4, to brick masonry including rounding off corners wherver required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.**(Internal) -**									
	(P.No.114, I.No.15.16 &15.26 of KPWD S.R2016-17)									
	Ground floor	Sqmt								
	Shop (3X6.8)			16	19.60	--	2.850	893.76		
	Shop (3X3.3)			18	12.60	--	2.850	646.38		
	Lift Lobby			1	28.00	--	2.850	79.80		
	Inside			1	9.60	--	2.850	27.36		
	outside Lift			1	9.03	--	2.850	25.73		
								1673.03		
	Deduction									
	RS1		0.5	13	3	--	2.55	49.73		
	RS2		0.5	22	2.9	--	2.55	81.35		
	RS3		1	2	2.5	--	2.55	12.75		